

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A web site system, comprising:

a web server system that is responsive to requests from online users by generating and returning web pages, wherein the web server system includes one or more applications that generate personalized content for recognized users based on browse histories of such users; and

an event history server that persistently stores event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system, wherein the event history server stores the event data substantially as corresponding events are reported to the event history server by the web server system, and makes such event data available in real time to the one or more applications to facilitate personalization of web pages for the users;

wherein the event history server implements a query interface through which the one or more applications retrieve the event data associated with particular users at least by event type and event time of occurrence, and the event history server is capable of responding to a query submitted by an application via said query interface by identifying particular events that match event criteria included in said query, and by returning the event data for said particular events;

and wherein the web server system uses the event data retrieved by the one or more applications via said query interface to generate personalized web pages for transmission to users.

2. (Currently amended) The web site system of Claim 1, wherein the event history server records the event data for a given event as an event object that includes at least the following: an event type identifier, an event value, ~~a user ID,~~ and a time stamp, each event object being separately retrievable via said query interface.

3. (Original) The web site system of Claim 1, wherein the event history server includes at least one storage layer server that stores the event data persistently by user ID, and further includes at least one cache layer server that caches event data of online users.

4. (Currently amended) The web site system of ~~Claim 2~~ Claim 3, wherein the cache layer server is configured to collect event data of an unrecognized user during a browsing session, and to pass such collected event data to the at least one storage layer server for persistent storage thereof if the unrecognized user becomes recognized during the browsing session.

5. (Original) The web site system of Claim 1, wherein the event history server comprises a plurality of cache layer servers, each of which is assigned to a different respective set of browse session IDs such that a given user remains assigned to a particular cache layer server throughout a browse session.

6. (Original) The web site system of Claim 1, wherein the event history server comprises a plurality of mirrored storage layer servers that persistently store like event data by user ID.

7. (Original) The web site system of Claim 1, wherein the query interface of the event history server supports queries of the form "has User X accessed URL Y?"

8. (Original) The web site system of Claim 1, wherein the query interface of the event history server supports queries of the form "when has User X accessed URL Y?"

9. (Original) The web site system of Claim 1, wherein the event history server records event data for substantially every mouse click action of every recognized user of a corresponding web site.

10. (Original) The web site system of Claim 1, wherein the event history server records impression event data indicative of specific items presented to users on dynamically generated web pages.

11. (Original) The web site system of Claim 1, wherein the at least one application includes a web search application that provides functionality for searching an index of web pages, and uses the event history server to identify and highlight web search result items that have previously been accessed by a user conducting a current search.

12. (Original) The web site system of Claim 1, wherein the at least one application includes an application that provides functionality for users to interactively view and organize their respective browse history data as recorded by the event history server.

13. (Original) The web site system of Claim 1, wherein the event history server generates user-specific Bloom filters reflective of event histories of specific users, and uses the user-specific Bloom filters to respond to queries from the at least one application.

14-45: (Canceled)

46. (Previously presented) The web site system of Claim 1, wherein the web server system is responsive to a page request from a user during a browsing session by retrieving, from the event history server, event data descriptive of at least one event that has already occurred during the browsing session, and by using the event data descriptive of said at least one event to provide personalized content to the user.

47. (Previously presented) The web site system of Claim 1, wherein the web server system reports the events directly to the event history server without use of a web log.

48. (Previously presented) The web site system of Claim 1, wherein the query interface includes functionality for the one or more applications to additionally retrieve the event data based on types of user-selectable display elements associated with the events.

49. (Previously presented) The web site system of Claim 1, wherein the event history server stores separate event objects for each of a plurality of respective events that occur during a user's browsing session, each event object being a separately retrievable entity that is retrievable via the query interface.

50. (Previously presented) The web site system of Claim 49, wherein each event object includes an event type identifier indicating a type of an associated event.

51. (Previously presented) The web site system of Claim 1, wherein the web server system comprises an event reporting component that runs on a web server machine and reports the events to the event history server over a network, said web server machine being separate from machines on which the one or more applications run.

52. (Previously presented) The web site system of Claim 1, wherein the event history server stores the event data substantially as corresponding events occur.

53. (Previously presented) The web site system of Claim 1, wherein the event history server additionally stores event data descriptive of events reported to the event history server by event reporting software that runs on user computers.

54. (Previously presented) The web site system of Claim 1, wherein the event history server is capable of executing a query of the following form, where N, T and Y are variable parameters: "recall last N events of type T for user Y."

55. (Currently amended) A method performed by a web site system, said web site system including a web server system that is responsive to requests from users by generating and returning web pages, said web server system including one or more applications that generate personalized content for recognized users based on browse histories of such users, the method comprising:

reporting event data from the web server system to an event history server, said event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system;

storing the event data on the event history server substantially as the corresponding events are reported to the event history server by the web server system, and making such event data available in real time to the one or more applications to facilitate personalization of web pages for the users;

with the one or more applications, retrieving, from the event history server, the event data associated with particular users, wherein the one or more applications retrieve the event data at least by event type and event time of occurrence via a query interface of the event history server, wherein the event history server responds to a query submitted by an application via said query interface by identifying particular events that match event criteria included in said query, and by returning the event data for said particular events;
and

with the web server system, using the event data retrieved by the one or more applications via said query interface to generate personalized web pages for transmission to users.

56. (New) The method of Claim 55, wherein storing the event data on the event history server comprises storing a separate event object for each of a plurality of user selection actions performed by a user during a browsing session, each event object being separately retrievable via said query interface.

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57. (New) The method of Claim 56, wherein each event object comprises event data specifying at least an event type, an event value, and an event time of occurrence.

58. (New) The method of Claim 56, wherein each of the event objects comprises event data specifying a type of display element selected by the user.

59. (New) The method of Claim 55, wherein storing the event data on the event history server comprises storing event objects for at least the following types of events: mouse click events, mouse-over events, and impression events, each event object being specific to a particular event and being separately retrievable via the query interface.

60. (New) The method of Claim 55, wherein retrieving the event data from the event history server via said query interface comprises submitting a query that specifies an event time range.

61. (New) The method of Claim 55, wherein retrieving the event data from the event history server via said query interface comprises submitting a query that specifies a particular type of display element.

62. (New) The method of Claim 55, wherein retrieving the event data from the event history server via said query interface comprises submitting a query of the form “has User X accessed URL Y?”

63. (New) The method of Claim 55, wherein retrieving the event data from the event history server via said query interface comprises submitting a query of the form “when has User X accessed URL Y?”

64. (New) The web site system of Claim 1, wherein the event history server is configured to store event objects for at least the following types of events: mouse click events, mouse over events, and impression events, each event object being specific to a particular event and being separately retrievable via the query interface.

65. (New) The web site system of Claim 1, wherein the event history server is capable of responding to a query that specifies an event time range by identifying, and returning event data for, events that fall within the event time range.

66. (New) The web site system of Claim 1, wherein the event history server is capable of responding to a query that specifies a particular type of display element and event type by

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identifying, and returning event data for, particular events that correspond to the specified type of display element and event type.